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Class Actions for Mass Torts: Doing Individual Justice by Collective Means

DAVID ROSENBERG*

INTRODUCTION

From the perspective of the common law tradition of individual justice, class actions are a necessary evil, but an evil nonetheless. That tradition projects the private law adjudicatory ideal: the norms of right, duty, and remedy are applied according to the specific, relevant circumstances of the particular parties in the given case.¹ It promises the parties not only their own day in court, but a good deal of control over what is said and decided on that day.²

Class actions loom as a subversive element in this context because they import the processes of bureaucratic justice—a mode of decision-making associated with administrative agencies, which lacks the common law's traditional commitment to party control and focus on the discrete merits of each claim.³ In contrast to the party initiated and orchestrated common law

* Professor of Law, Harvard University. I would like to express my appreciation for the helpful criticism of an earlier draft provided by Richard Stewart, Thomas Jackson and Lucien Bebchuk, and for the research and editorial assistance provided by Johnathan Massey, Leonard Gail, Lynn Blaise, Sally Hadden and Thomas Barnett.

1. See M. COHEN, *LAW AND THE SOCIAL ORDER* 251-52 (1933); M. FULLER, *THE PROBLEMS OF JURISPRUDENCE* 706 (temp. ed. 1949); H.M. HART & A. SACKS, *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW* 185 (temp. ed. 1958); Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 *YALE L.J.* 16 *passim* (1913).

2. R. FIELD, B. KAPLAN & K. CLERMONT, *MATERIALS FOR A BASIC COURSE IN CIVIL PROCEDURE* 28 (4th ed. 1978).

3. For a provocative elaboration of the statism and collectivism inherent in modern forms of bureaucratic justice, see generally, J. MASHAW, *BUREAUCRATIC JUSTICE* (1983). Cf. Michelman, *Foreword: Traces of Self-Government*, 100 *HARV. L. REV.* 4 (1986).

Class actions have frequently been criticized for inducing courts to ignore the individualizing requirements of substantive rules and, instead to adopt averaged, class-wide standards; see, e.g., Scott, *The Impact of Class Actions on Rule 10b-5*, 38 *U. CHI. L. REV.* 337 (1971). Because they greatly diminish the role of the parties in controlling the process, class actions are vulnerable to the further, broader criticism that they undermine important traditional barriers against partisan and substantive judicial intervention in the preparation, presentation, and settlement of claims. See, e.g., Elliott, *Managerial Judging and the Evolution of Procedure*, 53 *U. CHI. L. REV.* 306 (1986); Horowitz, *Decreeing Organizational Change: Judicial Supervision of Public Institutions*, 1983 *DUKE L.J.* 1265; Resnik, *Managerial Judges*, 96 *HARV. L. REV.* 374 (1982); Schuck, *The Role of Judges in Settling Complex Cases: The Agent Orange Example*, 53 *U. CHI. L. REV.* 337 (1986).

The analogy to administrative process is also a consistent staple of class action commentary. See, e.g., *Phillips Petroleum Co. v. Shutts*, 105 S. Ct. 2965, 2974 (1985) ("a class action resembles a 'quasi-administrative proceeding, conducted by the judge.'") (quoting 3B J. MOORE & J. KENNEDY, *MOORE'S FEDERAL PRACTICE* § 23.45[4-5] (1984)); Kalven & Rosenfield, *The Contemporary Function of the Class Suit*, 8 *U. CHI. L. REV.* 684 *passim* (1941).

trial, bureaucratic justice gives decisionmakers the controlling hand over the issue agenda as well as over the type and extent of evidence considered.⁴ But bureaucratic justice is most strikingly antithetical to notions of individual justice because it legitimates the aggregation and averaging of circumstances and interests of affected individuals in pursuit of the collective benefits from process efficiency, outcome consistency, and the maximum production of substantive goods. These goals are implemented through "public law" procedures which combine claims for uniform and summary treatment according to classifications based on a set of salient, if partial, common variables relating to the individuals involved.⁵

Nowhere do class actions seem a more alien force than in the torts system, which epitomizes the individual justice tradition.⁶ The hallmark of this system—at least as a formal matter—is its adherence to the "private law" mode of case-by-case, particularized adjudication.⁷ Attention is lavished on the particular details of each claim to ensure that the norms of liability and remedy are tailored to the specific facts of the defendant's conduct and its causal relationship to the plaintiff's injury. Every effort is made to avoid (or at least minimize) the erroneous redistribution of wealth that occurs when

4. See, e.g., *Mathews v. Eldridge*, 424 U.S. 319, 335-39 (1976); *Richardson v. Perales*, 402 U.S. 389, 389-401 (1971).

5. See, e.g., *Heckler v. Campbell*, 461 U.S. 458, 461, 468-69 (1983) (concluding that there exist neither statutory nor constitutional obstacles to the use by the Social Security Administration of a "grid" consisting of a four-factor matrix—physical condition, age, education, and work experience—to categorize and determine individual disability claims).

The dichotomy between individual and bureaucratic justice—which, like most conceptualizations is in reality a continuum of tensions and contradictions—reflects another, more abstract categorization in forms of decision making. Corresponding to the particularizing nature of individual justice is the context-based form of decisionmaking—an ad hoc, multifactored, balancing of competing interests on a case-by-case basis. Juxtaposed to contextual decisionmaking is the form that operates from general classifications and statistical rationality. See Michelman, *supra* note 3. The dichotomy between contextual and generalized decisionmaking has received an ideological gloss consistent with a good deal of contemporary legal scholarship, an extreme example being the pop socio-political theory associating the contextual form with the "feminine voice" (connoting "good") and generalized form with the "male" (connoting "bad"). See C. GILLIGAN, *IN A DIFFERENT VOICE* (1982); Sherry, *Civic Virtue and the Feminine Voice in Constitutional Adjudication*, 72 *YALE L. REV.* 543 (1986); see also, e.g., MacKinnon, *Feminism, Marxism, Method and the State: Toward Feminist Jurisprudence*, 8 *SIGNS* 635, 638 (1983); Scales, *The Emergence of Feminist Jurisprudence: An Essay*, 95 *YALE L.J.* 1373, 1376-80 (1986).

Both sets of dichotomies pose deep epistemological questions as to whether knowledge of the general—knowledge founded on probabilistic predictions and inferences—is separable and distinct from knowledge of the particular—knowledge that captures the intrinsic and unique aspects of a specific situation.

6. See Chayes, *The Role of the Judge in Public Law Litigation*, 89 *HARV. L. REV.* 1281, 1282-83 (1976); Sugarman, *Doing Away with Tort Law*, 73 *CALIF. L. REV.* 555, 604 (1985); Trangsrud, *Joinder Alternatives in Mass Tort Litigation*, 70 *CORNELL L. REV.* 779, 819 & n. 224 (1985).

7. Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 *HARV. L. REV.* 849, 900-05 (1984).

innocent defendants are held liable or deserving plaintiffs denied compensation.⁸

In mass tort cases involving claims for personal injury,⁹ which pose daunting problems of causation and remedy, the price of individual justice is notoriously high.¹⁰ Because they typically involve complex factual and legal questions, mass tort claims are exceedingly, if not prohibitively, expensive to litigate. The questions of whether the defendant's conduct failed to satisfy the governing standard of liability frequently entail interrelated technological and policy issues that require extensive discovery, expertise, and preparation to present and resolve adequately. Equally demanding are the causation issues in mass tort cases, such as whether the plaintiff's condition was caused by exposure to the substance in question or to some other source of the same disease risk.¹¹

The case-by-case mode of adjudication magnifies this burden by requiring the parties and courts to reinvent the wheel for each claim. The merits of each case are determined de novo even though the major liability issues are

8. See Fried, *Is Liberty Possible?*, in 3 THE TANNER LECTURES ON HUMAN VALUES 91, 120-21 (S. McMurrin ed. 1982); Posner, *The Concept of Corrective Justice in Recent Theories of Tort Law*, 10 J. LEGAL STUD. 187, 190 (1981).

9. Mass accidents characteristically involve hazardous activities of a relatively small number of business enterprises, which inflict personal injury and the risk of personal injury on relatively large segments of the population. The injury and risk from such accidents may be sustained simultaneously or sequentially, over long periods of time by members of the victim population. In contrast to mass disaster accidents such as the collapse of two skywalks in the lobby of the Kansas City Hyatt Regency Hotel, which killed 114 and seriously injured at least 212 others, see *In re Federal Skywalk Cases*, 93 F.R.D. 415 (W.D. Mo. 1982), vacated, 680 F.2d 1175 (8th Cir. 1982), mass exposure accidents involve long latency disease striking victims who are widely dispersed over decades and territory. See, e.g., Rosenberg, *supra* note 7, at 851-55; Weinstein, *Preliminary Reflections on the Law's Reaction to Disasters*, 11 COLUM. J. ENVTL. L. 1 (1986). The catastrophic effects from exposure of millions of insulation workers to asbestos, illustrate the nature and consequences of modern mass exposure accidents. For an insightful and graphic report of the asbestos litigation see, P. BRODEUR, *OUTRAGEOUS MISCONDUCT: THE ASBESTOS INDUSTRY ON TRIAL* (1985). For another case history of a mass exposure accident, but one which broadly articulates and examines the complex questions of institutional efficacy and legitimacy such accidents pose for the tort system, see P. SCHUCK, *AGENT ORANGE ON TRIAL: MASS TOXIC DISASTERS IN THE COURTS* (1986).

10. Rubin, *Mass Torts and Litigation Disasters*, 20 GA. L. REV. 429 (1986); Weinstein, *supra* note 9, at 30 & n.92.

11. See Rosenberg, *supra* note 7; Weinstein, *supra* note 9, at 9-10.

Other costly and complicated questions frequently raised by mass accident cases include questions of choice of law and extraterritorial jurisdiction for claims asserted by non-resident, of the existence and extent of insurance coverage, and of allocating the assets and interests in bankrupt defendant firms among present and future victims and between victims and other creditors and defendant firms. See, e.g., *In re Union Carbide Corp. Gas Plant Disaster at Bhopal, India* in December, 1984, 634 F. Supp. 842 (S.D.N.Y. 1986); Jernberg, *Insurance for Environmental and Toxic Risks: Basic Analysis of the Gap Between Liability and Coverage*, 34 FED'N INS. COUNS. Q. 123 (Winter 1984); Note, *Adjudicating Asbestos Insurance Liability: Alternatives to Contract Analysis*, 97 HARV. L. REV. 739 (1984); Note, *Recent Development, Toxic Torts and Chapter 11 Reorganization: The Problem of Future Claims*, 38 VAND. L. REV. 1369, 1395-96 (1985).

common to every claim arising from the mass tort accident, and even though they may have been previously determined several times by full and fair trials.¹² These costs exclude many mass tort victims from the system and sharply reduce the recovery for those who gain access. Win or lose, the system's private law process exacts a punishing surcharge from defendant firms as well as plaintiffs.

These costs of litigation, which are borne directly by the parties, also cast a broad array of shadow prices that have widespread indirect effects. The redundant adjudication of mass tort claims thus consumes vast quantities of public resources, raising the price of access for other, sporadic, types of tort claims.¹³ Moreover, even though most of the claims arising from mass accidents are eventually settled on the basis of recovery patterns projected from relatively few trials,¹⁴ the settlement calculus will reflect the costs of redundant, de novo, particularized adjudication, as well as the incentives of each party to increase the litigation expenses for the other. These conditions generally disadvantage claimants. Because defendant firms are in a position to spread the litigation costs over the entire class of mass accident claims, while plaintiffs, being deprived of the economies of scale afforded by class actions, can not, the result will usually be that the firms will escape the full loss they have caused and, after deducting their attorneys' shares, the victims will receive a relatively small proportion of any recovery as compensation.¹⁵

12. See Rosenberg, *The Dusting of America: A Story of Asbestos—Carnage, Cover-up, and Litigation* (Book Review), 99 HARV. L. REV. 1693, 1701 (1986).

13. I have elsewhere distinguished mass accidents from "sporadic" accidents such as automobile collisions—what Holmes termed "isolated, ungeneralized wrongs"—from "mass" accidents. See Rosenberg, *supra* note 7, at 854-55.

14. See D. HENSLEY, W. FELSTNER, M. SELVIN & P. EBENER, *ASBESTOS IN THE COURTS: THE CHALLENGE OF MASS TOXIC TORTS* (1985) (published by Rand Corporation's Institute for Civil Justice) [hereinafter D. HENSLEY]; Elliott, *supra* note 3, at 324 n.74.

15. Some recent commentary urges courts and Congress to consider developing and expanding the scope of class action alternatives, particularly test-case, pattern settlements, and trans-jurisdiction consolidation of state and federal claims. See, e.g., Miller & Crump, *Jurisdiction and Choice of Law in Multistate Class Actions After Phillips Petroleum Co. v. Shutts*, 96 YALE L.J. 1, 77 (1986); Transgrud, *supra* note 6 *passim*. These commentators fail to recognize the inadequacy of such alternatives in the toxic tort context where information, cost barriers, and the long latency periods of diseases such as cancer prevent the initiation and actual (even if informal) joinder of many claims.

More generally, when the sole alternative to case-by-case adjudication consists of procedures, such as pattern settlements and consolidation, which curtail redundancy and spread litigation expenses only partially or not at all among all benefited claimants, the costs of that residual degree of inefficiency will be deducted from the settlement offered to each claimant. The availability of a class action alternative to case-by-case adjudication is necessary if there is to be any substantial reduction of individualizing litigation costs and their bite from the compensation received by victims. See Rosenberg, *supra* note 7, at 911-12 & nn.236-37. For these reasons, and, in addition, because of free rider problems and the high costs of administration and duplicative effort, the "litigation network" approach, see Coffee, *Rescuing the Private Attorney General: Why the Model of the Lawyer as Bounty Hunter is Not Working*, 42 MD. L. REV. 215, 239-41 & nn.56-57 (1983), by which a number of plaintiff lawyers voluntarily coordinate and share the expense and fruits of their discovery work, will rarely if ever serve as an efficient and substantively adequate alternative to class actions.

As a consequence, the tort system's primary objectives of compensation and deterrence are seriously jeopardized.¹⁶

Despite their potential for reducing litigation costs and burdens, and, consequently, enhancing the system's capacity to achieve its compensation and deterrence objectives, class actions have consistently received a hostile reception in mass tort cases.¹⁷ In opposing class actions, these decisions and supporting commentary draw upon the individual justice tradition and its rejection of the modes of bureaucratic justice.¹⁸ The common premise of these and similar objections to mass tort class actions is that the bureaucratic justice of class treatment—the collectivization of claims for aggregative and averaged disposition—achieves administrative goals of efficiency, consistency, and maximum substantive output by subordinating the interests of individual victims (although not of defendant firms) to the interests of the

16. See generally Rosenberg, *supra* note 7, at 900-05.

17. See generally Williams, *Mass Tort Class Actions: Going, Going, Gone?*, 98 F.R.D. 323 (1983); see, e.g., *In re Asbestos School Litig.*, 104 F.R.D. 422 (E.D. Pa. 1984), *aff'd in part, vacated in part*, 789 F.2d 996 (3d Cir. 1985), *vacated*, 791 F.2d 920 (3d Cir. 1986); *In re Bendectin Prods. Liab. Litig.*, 749 F.2d 300 (6th Cir. 1984).

Although the wasteful and abusive consumption of resources by mass tort cases is well known, the courts have tended to discount these problems, giving the demands of individual justice almost automatic priority over the need for class action efficiencies. See Trangsrud, *supra* note 6, at 819. In part, this response may be a product of limited perception of the problems. Courts rarely experience the effects of this inefficiency directly or recognize their systemic implications on compensation and deterrence. This shortsightedness may be due to the detailed character of the very inquiry required to fulfill the mandate of individual justice in any given case. Concentration on the particulars is likely to obscure patterns and connections with other cases. See Chayes, *Foreword: Public Law Litigation and the Burger Court*, 96 HARV. L. REV. 4, 27-28 (1982); Fiss, *Groups and the Equal Protection Clause*, 5 PHIL. & PUB. AFF. 107 (1976); Rosenberg, *supra* note 7, at 885 & n.141.

Moreover, complexity compounded by high litigation costs also skews liability theories in the direction of more easily provable particularistic claims, such as product manufacturing defect claims predicated on alleged departures from a defendant firm's professed standard of quality and performance, and away from more programmatic challenges to the standard itself. Cf. Schwartz, *Foreword: Understanding Products Liability*, 67 CALIF. L. REV. 435, 459-61 & nn. 157-68 (1979). Another factor diluting the effects and perception of inefficiency is the decentralized structure of the tort system, which disperses decisionmaking over time and over widely separated territorial and jurisdictional domains. Finally, only a minute fraction of the tort claims that arise or that are filed ever come to the formal attention of courts; in excess of ninety percent are settled. See D. HENSLER, *supra* note 14; H. ROSS, *SETTLED OUT OF COURT: THE SOCIAL PROCESS OF INSURANCE CLAIMS ADJUSTMENT* (1970); Dam, *Class Actions: Efficiency, Compensation, Deterrence, and Conflict of Interest*, 4 J. LEGAL STUD. 47, 57 (1975); Weinstein, *supra* note 9, at 23. A number of these settlements include court enforceable secrecy provisions preventing plaintiffs and their attorneys from disclosing the nature of the claim, the information obtained during discovery, and the terms of settlement. See *Seattle Times Co. v. Rhinehart*, 104 S. Ct. 2199 (1984); Rosenberg, *supra* note 12, at 1701. While some claims may be settled through the good offices of judges, the number of such settlements is relatively small, and, in any event, direct judicial oversight of the substantive adequacy of their terms is all but precluded by relative lack of information, and by norms of impartiality and deference to party control. Cf. P. SCHUCK, *supra* note 9, at 143; Resnik, *supra* note 3.

18. See *supra* notes 3-5.

class as a whole.¹⁹ Under this critique, the extent to which the interests of individual victims are sacrificed is measured against the baseline of how their claims would fare in separate actions. Class actions, for example, are found unacceptable because they transfer control over the case from the individual to the class as an entity, or more accurately, the class attorney.²⁰ In toxic tort cases, class actions are viewed as a device for undermining causation requirements through averaging.²¹ Instead of differentiating the "risk portfolios" applicable to each victim in the exposed population,²² class actions invite courts to make causal determinations on an undifferentiated basis for all members of defined reference groups or subclasses, or even for all members of the victim class as a whole.

Individual justice critiques of class actions have little power when the primary purpose of tort liability is taken to be the utilitarian objective of maximizing welfare by deterring socially inappropriate risk-taking.²³ The aggregation and averaging techniques of bureaucratic justice are not only consistent with the social welfare justification for tort liability—at least, when defendant firms are not on the whole under or overcharged—but they also produce the positive benefits of lower administrative costs.²⁴ When, however, tort liability serves to vindicate rights to personal security transgressed by a defendant's wrongful conduct, the individual justice arguments against class actions may, depending on the normative content of the rights posited, suggest the location of certain outside limitations on the use of class actions in mass tort cases.²⁵ But, as I will explain below, these individual

19. See P. SCHUCK, *supra* note 9, at 269.

20. See Robinson, *Probabilistic Causation and Compensation for Tortious Risk*, 14 J. LEGAL STUD. 779 (1986).

Class actions are also criticized for providing disproportionately greater compensation to less severely injured victims in comparison to and at the expense of the compensation received by more severely injured victims. See P. SCHUCK, *supra* note 9, at 264.

21. Cf. Scott, *supra* note 3.

22. See Elliott, *Why Courts? Comment on Robinson*, 14 J. LEGAL STUD. 799, 803 (1985) (opposing mass tort class actions because the "composition of the 'risk portfolio' is unique for each individual so that . . . the common issues of fact [relating to proof of causation] do not predominate.").

23. See generally G. CALABRESI, *THE COSTS OF ACCIDENTS* (1970); S. SHAVELL, *THE ECONOMIC ANALYSIS OF TORT LAW* (unpublished manuscript); Landes & Posner, *The Positive Economic Theory of Tort Law*, 15 GA. L. REV. 851 (1981).

24. See Calabresi, *Concerning Cause and the Law of Torts: An Essay for Harry Kalven, Jr.*, 43 U. CHI. L. REV. 69 (1975); Epstein, *Two Fallacies in the Law of Joint Torts*, 73 GEO. L.J. 1377 (1985).

25. Generally, rights-based limits would be reached when, as measured by the relevant entitlements baseline, collectively averaged treatment redistributes to one class of claimants the welfare of another class, which receives no offsetting benefits. Redistribution would not of itself warrant affording the disadvantaged claimants individually particularized treatment, unless the process of separate actions presented a less pronounced danger of redistribution than the class action. As such, process is merely an instrument for doing distributional justice. It is possible, of course, to conceive of process as having intrinsic participatory value, which should then be

justice arguments are exaggerated. They ignore not only the realities of claimant dependency and powerlessness in individual actions, but they also fail to recognize the existence of collectivizing forces operating in the mass accident context, particularly the class-wide nature of the risk *ex ante*, which exerts a unifying influence over the security interests (deterrence) and protective responses (insurance) of the potential accident victims. A major aim of this paper is to demonstrate that, given such *ex ante* conditions, bureaucratic justice implemented through class actions provides better opportunities for achieving individual justice than does the tort system's private law, disaggregative processes.

This paper examines the asserted conflict between the ideal of individual justice and the collective processes of class actions. Section I sketches the aggregative and averaging possibilities afforded by class actions in mass tort cases, and outlines the utilitarian as well as rights-based justifications for their relatively non-controversial use in overcoming the cost barriers that prevent access to the system. It also responds to objections raised against class actions from these theoretical perspectives. Criticisms of class actions, and the "public law" approaches they exemplify, as inefficient methods of regulating risk are shown to be substantially overstated. Rights-based objections will be seen to fail because their central assumption—the equation of individual trial outcomes and individual justice—is contingent and problematic. Moreover, both sets of objections are largely based on an inadequate understanding of the class action mechanism.

Section II demonstrates the existence of important intersections in the mass tort context where the ends of individual justice are better served by collective, rather than by disaggregative, processes. This will be true generally when the substantive liability or remedial norm is collective in nature.²⁶ But,

incorporated in the entitlements baseline. See Michelman, *The Supreme Court and Litigation Access Fees: The Right to Protect One's Rights*, 1973 DUKE L.J. 1153, 1193-97. But, it would be incorrect to equate the participatory value with the notion of individual control. The participatory value could just as easily be expressed in terms of the group solidarity promoted by the collective processes of class actions.

In any event, while class actions are often criticized for denying individual control, the criticism is usually expressed as an instrumental rather than ontological argument. That is, individual control is respected not for its own sake, but as a means to such ends as the venting of emotions to ameliorate alienation and the potential for violence. See Trangsrud, *supra* note 6, at 820 (emphasizing the "psychological and emotional importance of individually vindicating [one's] rights against the responsible parties" in cases of severe personal injury). But even if it could be said that individual control should be valued for its own sake, and should be given greater weight than group solidarity, individual control is not necessarily, as I explain *infra* notes 78-85 and accompanying text, precluded by class actions.

26. Collective normative premises in tort law are well illustrated by the justifications conventionally given for strict products liability. See generally Calabresi, *supra* note 24. Using strict products liability to achieve optimal deterrence obviously implies the collective norm of maximizing social welfare. To the extent that consumers lack sufficient information to gauge the risks latent in the products and services they purchase, the threat of "strict" manufacturer

for the purposes of this section, governing norms are assumed to possess an individualistic content.²⁷ The explanation for the harmonies in individual and bureaucratic justice rests instead on a critique of the substantive distortions created by the tort system's traditional private law process. The disaggregative, linearly retrospective character of this process leads courts to ignore the ex ante effects of accident risks on the rights and lives of the at-risk population. Because these risks are frequently indivisibly experienced class-wide, their pre-accident effects on the at-risk population will be uniform and average in nature. In these situations, unless the due care liability norm²⁸ and the make whole remedial norm²⁹ are applied on an aggregate and averaged basis, the distributional fairness implicit in the notion of individual justice will be thwarted.

I. AGGREGATION AND AVERAGING OF CLAIMS IN A MASS TORT CLASS ACTION

Opposition to aggregation and averaging in mass tort class actions is in fact largely anticipatory. In the relatively few class actions which have been certified, the scope of collective adjudication has been narrowly circumscribed to preserve party control and the opportunity for individualized determinations of noncommon liability and damage questions.³⁰ Most of the public

liability (with appropriate defenses of product misuse and contributory negligence) may serve to maximize social welfare not only by inducing due care in the production and marketing of these goods but also by achieving the efficient levels of consumption and of consequent hazard. See S. SHAVELL, *supra* note 23. Similarly, the loss spreading justification of strict products liability implements social justice by pooling risks. Strict liability simultaneously relieves the injured of concentrated loss and distributes that burden in relatively small portions to those who have benefited from the product or service. See K. ABRAHAM, *DISTRIBUTING RISK: INSURANCE, LEGAL THEORY, AND PUBLIC POLICY* 26 (1986); cf. ARISTOTLE, *NICHOMACHEAN ETHICS* V.5.II32b-II34a (W. Ross trans. 1926); Dworkin, *What Is Equality? Part 2: Equality of Resources*, 10 *PHIL. & PUB. AFF.* 283 (1981). For enlightening elaboration and critique of strict product liability scholarship, see Priest, *The Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law*, 14 *J. LEGAL STUD.* 461 (1985).

27. It is also assumed, for purposes of this section that there are no significant cost and information barriers preventing resort to separate actions for mass tort claims.

28. The "due care" reference is meant to encompass rights-based notions of negligence, under which liability requires a finding that the defendant was at fault or acted wrongfully. See Posner, *supra* note 8; Schwartz, *New Products, Old Products, Evolving Law, Retroactive Law*, 58 *N.Y.U. L. REV.* 796 (1983).

29. The "make whole" reference incorporates the notion of tort damages as generally seeking to restore plaintiffs to the distributional position they would have occupied had the accident not occurred. See *East River Steamship Corp. v. Transamerica Delaval Inc.*, 106 S. Ct. 2295 & n.9 (1986); Prosser, *The Borderland Between Tort and Contract*, in *SELECTED TOPICS ON THE LAW OF TORTS* 380, 424-27 (Thomas M. Cooley Lectures, Fourth Series 1953).

30. See, e.g., *Payton v. Abbott Laboratories*, 83 F.R.D. 382 (D. Mass. 1979) (conditional order granting class certification), *vacated*, 100 F.R.D. 336 (D. Mass. 1983) (class action decertified); *In re "Agent Orange" Prod. Liab. Litig.*, 100 F.R.D. 718 (E.D.N.Y. 1983) (certifying plaintiff class action), *vacated*, 611 F. Supp. 1221 (E.D.N.Y. 1985) (granting manufacturers' motion for summary judgment against opt-out plaintiffs on grounds of failure to establish causation and to overcome government contract defense).

law procedures which might be used in mass accident class actions—especially aggregating claims on a mandatory basis and averaging causation and damages—have been employed only in settlements, and never by coercive court order.³¹ Indeed, even when mass tort class actions have been certified for trial, the collective process is entirely elective since class members are entitled to opt out in favor of individual actions.³² Class treatment, moreover, has been extended solely to the common questions of law and fact concerning liability, preserving the right to an individual trial on damages.³³ In some cases courts have gone slightly beyond the conventional bifurcation of liability and damage elements of the tort cause of action. They have instead designated certain common liability issues for class treatment, while remanding the remaining liability questions relating to the circumstances of each class member to an individual trial before, or along with, determination of damages.³⁴

A. *Potential Applications of Public Law Process: Mandatory Class Actions and Damage Scheduling*

Although contemporary class action practice generally respects the principles of individual justice by maintaining voluntary participation, critics of the procedure correctly recognize its potential to develop in more innovative public law directions.³⁵ Mandatory class actions combined with damage scheduling are two changes in current practice that would have the most important applications to mass torts, especially those involving long-latency disease risks from toxic substance exposure.³⁶ Class actions would be man-

31. See, e.g., *In re "Agent Orange" Prod. Liab. Litig.*, 597 F. Supp. 740 (E.D.N.Y. 1984). For a description of the *Agent Orange* settlement, see P. SCHUCK, *supra* note 9, at 143.

32. FED. R. CIV. P. 23(b)(3) guarantees absentees the right to opt out of the class action in favor of separate actions on all issues, common as well as individual. The "opt-out right" may now have received constitutional status, at least in state class actions asserting extra-territorial jurisdiction over absentees. See *Phillips Petroleum Co. v. Shutts*, 105 S. Ct. 2695 (1985); *Miller & Crump*, *supra* note 15, at 52.

Certification of "mandatory" class actions pursuant to FED. R. CIV. P. 23(b)(1) or (b)(2), under which there is no opt-out right, have been consistently denied. See, e.g., *In re Asbestos School Litig.*, 104 F.R.D. 422 (E.D. Pa. 1984), *aff'd in part, vacated in part*, 789 F.2d 986 (3d Cir. 1985), *vacated*, 791 F.2d 920 (3d Cir. 1986); *In re Northern Dist. of Cal. "Dalkon Shield" IUD Prods. Liab. Litig.*, 526 F. Supp. 887 (N.D. Cal. 1981), *rev'd and vacated*, 693 F.2d 847 (9th Cir. 1982); *McDonnell Douglas Corp. v. United States Dist. Ct.*, 523 F.2d 1083 (9th Cir. 1975), *cert. denied*, 425 U.S. 911 (1976).

33. See, e.g., *Payton*, 83 F.R.D. 382. Bifurcation for class-wide resolution of liability questions and individualization of damages is endorsed by FED. R. CIV. P. 23(c)(4), 1966 advisory committee note. See generally 7B C. WRIGHT, A. MILLER & M. KANE, *FEDERAL PRACTICE AND PROCEDURE* § 1790 (2d ed. 1986).

34. See, e.g., *In re Bendectin Prods. Liab. Litig.*, 749 F.2d 300 (6th Cir. 1984); *In re Beverly Hills Fire Litig.*, 695 F.2d 207 (6th Cir. 1982), *cert. denied*, 461 U.S. 929 (1983); *Payton*, 83 F.R.D. 382.

35. See, e.g., P. SCHUCK, *supra* note 9; Trangsrud, *supra* note 6.

36. See generally Rosenberg, *supra* note 7, at 905.

datory both in the sense that (i) courts could act on their own initiative to certify pending and future mass tort claims for class treatment, and (ii) there would be no opportunity to opt out in order to prosecute a separate action on the issues common to all claims as well as the issues specific to each.³⁷ To achieve even greater efficiencies in the process, courts would impose damage schedules based on the average loss suffered by members of relevant subclasses or even by the class as a whole.³⁸

The choice of disaggregative over collective adjudication for mass tort accidents has profound consequences for the parties as well as the tort system's compensation and deterrence objectives. The costs of traditional disaggregative, private law processes exclude many claims from the system. The cost barriers are compounded by other prevalent conditions, such as the low income status of a significant number of the victims, and the relatively low probability of success at trial that characterizes these legally and factually complex cases. In addition, to the extent that courts begin to use proportional liability to resolve the causation issues that routinely arise in toxic tort cases, the costs of disaggregative process are magnified in the evaluation of these claims by plaintiff attorneys. Many of these claims are rendered unmarketable to competent plaintiff attorneys because the returns on their contingent fee investment, which are likely to be marginally competitive to begin with for the reasons noted above, are discounted in proportion to the probability of causation in each case.³⁹ As a result, many victims not only are denied access to the system and receive no compensation, but the deterrent effects of threatened liability are significantly reduced.

In addition, the case-by-case, individualized processing of the mass tort claims that are filed confers a strategic edge upon defendant firms. While

37. As discussed *infra* note 92, the mandatory nature of the class action might be relaxed in certain cases to allow individual trials on damages. In that event, however, the individual trials would be conducted not in separate actions, but under the auspices and supervisory authority of the class action.

38. Recent advances in epidemiological and related methodologies have made such damage scheduling feasible. See Lagakos & Mosteller, *Assigned Shares in Compensation for Radiation-Related Cancers*, 6 RISK ANALYSIS 345 (1986). This paper reports on the development by the National Institutes of Health of radioepidemiologic tables pursuant to congressional mandate in Pub. L. No. 97-414, § 7, 96 Stat. 2049 (1983) (Jan. 4, 1983), appended to the Orphan Drug Act, 42 U.S.C. § 241 (1985). These tables are designed to facilitate the use of causally proportioned liability in the trial of damage claims arising from atomic bomb tests in the western states as well as from other accidents involving radiation exposure. The tables go beyond the undifferentiated form of proportional liability—which would apportion damages according to the average probability of causation for the exposed population as a whole. Representing state-of-the-art epidemiological analysis, the tables prescribe formulas for partitioning the exposed population into a hierarchy of subgroups or reference sets, and for assigning to each a value derived from the set's fractional share of the aggregate excess disease incidence in the population as a whole. For a critical commentary on the tables' effort to enable proportional liability at the subgroup level, see Rosenberg, *The Uncertainties of Assigned Shares Tort Compensation: What We Don't Know Can Hurt Us*, 6 RISK ANALYSIS 363 (1986).

39. See Rosenberg, *supra* note 7, at 894.

it prevents victims from deriving the benefits of concerted action, the traditional process has no similar effect on the capacity of defendant firms to spread litigation costs and prepare the common questions efficiently on a once-and-for-all basis. Most liability issues will be substantially the same for all claims arising from a given mass accident, and thus defendants can always aggregate claims to exploit (at times quite abusively) the efficiencies of a virtual class action.⁴⁰ Because of their cost-spreading advantages, a defendant firm typically can afford not only to invest more in developing the merits of the claim than the opposing plaintiff attorney, but also to finance a "war of attrition" through costly discovery and motion practice that depletes the adversary's litigation resources.⁴¹ The consequences of redundantly litigating common questions thus skews the presentation of the merits, promotes abusive strategic use of procedure, needlessly consumes public resources, and ultimately drains away a large amount of the funds available to redress, by judgment or settlement, victim losses.

While defendant firms enjoy litigation cost advantages because of the system's traditional disaggregative processes, the most consistently successful beneficiaries of case-by-case adjudication are the lawyers—both for defendants and plaintiffs.⁴² A major factor in the escalating costs of the tort system is attorney fees, against which there are no presently effective market or regulatory controls. Defense lawyers contribute to the dismal ratio of litigation costs to net compensation in mass tort litigation by exploiting their hourly fee arrangements. Under such arrangements defense lawyers have every incentive to make work for themselves, particularly by grossly overstaffing multi-defendant cases, and by resisting any collective process replacement for case-by-case adjudication. Although their clients gain to some degree from these practices, because they translate into increased litigation expense for plaintiffs, the costs inflicted on the public—in terms of the needless consumption of attorney and judicial resources—by defense attorney avarice are unmitigated. For similar reasons, plaintiff attorneys, too, prefer disaggregative process. Class treatment of mass tort claims from a particular accident requires only a fraction of the legal services provided by plaintiff attorneys compared to case-by-case adjudication, which disperses claims widely over territory and time.⁴³ That courts have the power in class actions

40. See *id.* at 902.

To be sure, plaintiff attorneys are "repeat players" who can hedge against the risks of litigation by diversifying their portfolio of cases. But such diversification is unlikely to enable attorneys to offset the concentrated risks of multiple mass tort claims. This is because expertise developed in litigating the mass tort claims will have only the most general application in the vast bulk of the cases comprising the attorney's portfolio.

41. See Rosenberg, *supra* note 12, at 1705.

42. See generally Rosenberg, *supra* note 12; Coffee, *supra* note 15, at 247.

43. The dimensions of plaintiff attorney stakes and interests in preserving separate actions are indicated by the billion dollars in contingency fees guaranteed plaintiff attorneys in order

to review class settlements and to determine class attorney fees helps to explain plaintiff attorney aversion to collective process.⁴⁴

Class treatment of these claims would produce radically different results from those generated by traditional case-by-case adjudication.⁴⁵ Class action aggregation would very likely make the low value claims marketable to competent plaintiff attorneys, and therefore firms would be faced with liability for a much larger percentage of the compensable losses resulting from mass tort accidents. If mandatory class actions were convened by courts on their own initiative, the unnecessary costs of redundantly litigating the common questions presented in marketable mass tort claims would be eliminated. In addition, mandatory certification would substantially diminish the incentives of defendants to exploit their cost advantages in individual actions, and would negate the motivation of and eliminate the costly efforts by plaintiff and defense attorneys to oppose class actions in order to protect their fees rather than their clients' interests. The savings in administrative expense would substantially increase the proportion of the awards recovered by victims as compensation.

Damage scheduling could be used to further reduce litigation costs entailed by the individualized determination of damages.⁴⁶ Such a procedure would greatly increase access for low value claims.⁴⁷ Because scheduling eliminates much of the need for customized legal services, thus yielding even greater returns in compensation on relatively high value claims than would individualized determinations, it should not be used exclusively in low value class actions. Regardless of the value of the claims involved, the most dramatic cost savings could be achieved if the schedule provided compensation according to the average income loss and probability of causation for the population as a whole. Victims with above average losses or exposure might

to gain their support for including future claims in the Manville reorganization plan. See N.Y. Times, Feb. 17, 1986, at D1, col. 3. It did not phase these attorneys that exclusion of future claims would very likely prevent reorganization and thus the firm's capacity to generate sufficient income to compensate future victims of asbestos-related disease.

44. See FED. R. Civ. P. 23(e); *In re "Agent Orange" Prod. Liab. Litig.*, 597 F. Supp. 740 (approving settlement of class action); *In re "Agent Orange" Prod. Liab. Litig.*, 611 F. Supp. 1296 (E.D.N.Y. 1985) (awarding attorney's fees in class action).

45. See generally Rosenberg, *supra* note 7.

46. See Rosenberg, *supra* note 7, at 917-19.

47. Damage scheduling is preferable to increasing fee awards as a means of encouraging plaintiff attorneys to accept small claim class actions. Increased fee awards may all but defeat the compensation goal by transferring most of the recovery to the class attorney. Dam, *supra* note 17, at 52. Cf. *Eisen v. Carlisle & Jacquelin*, 391 F.2d 555, 567 (2d Cir. 1968), *vacated and remanded*, 417 U.S. 156 (1974) (expressing "reluctan[ce] to permit actions to proceed where they are not likely to benefit anyone but the lawyers who bring them"). From the perspective of deterrence, moreover, increased attorney fees may create an excessive incentive to bring suit. See Shavell, *The Social Versus the Private Incentive to Bring Suit in a Costly Legal System*, 11 J. LEGAL STUD. 333 (1982).

well find that their treatment at a statistical average was more than offset by the savings in litigation costs, including attorney fees.⁴⁸

B. *Utilitarian Deterrence and Bureaucratic Justice*

The prevailing utilitarian justification for tort liability is to create optimal incentives for accident avoidance.⁴⁹ Accordingly, the threat of liability should induce firms engaged in risky activities to take due or optimal care by investing in safety precautions against accidents so long as the injury loss avoided exceeds, at the margin, the expenditures on prevention. Threatened tort liability also may advance deterrence objectives by compelling firms to internalize the residual injury loss—loss which is unavoidable by optimal care—thereby inducing moderation of their levels of activity and the corresponding levels of accident risk.⁵⁰ When administrative expenses⁵¹ are taken into account, the calculus becomes the extremely complicated one of maximizing the system's functional productivity in terms of the net benefits from tort liability deterrence.⁵²

Public law processes promote this social welfare maximizing function of tort liability in all phases, both by providing incentives to take optimal care and to moderate activity levels, and by achieving sharp reductions in administrative costs. By making relatively low value claims marketable to competent plaintiff attorneys, class actions bolster the deterrent effect of threatened tort liability. Absent class action treatment, the bulk of these claims would be excluded from the system, reducing both the firm's incentives to take precautions and its internalization of residual accident costs. The potential for administrative cost savings is very high as well. Mandatory class actions would radically reduce the consumption of party and public resources for redundant, case-by-case adjudication. It would also substantially diminish the cost advantage conferred on defendant firms by the private law, disaggregative process—which in reality is disaggregative only on the plaintiff side. Damage scheduling to replace individualized causation and injury loss determinations would not only increase the marketability of very low value claims, but also would increase the efficiency of the process overall.

48. Section II demonstrates that even in the absence of such offsetting benefits, aggregate and averaging treatment may not only be reconcilable with principles of individual justice, but will in a significant number of situations better effectuate those principles than the disaggregative process of separate trials to individualize liability and damages.

49. See generally S. SHAVELL, *supra* note 23.

50. See Shavell, *Strict Liability Versus Negligence*, 9 J. LEGAL STUD. 1, 24-25 (1980).

51. These are the public and private costs incurred by the courts and the parties in determining the factual basis of claims, in interpreting and applying the governing rules, and in conforming behavior and practices to such rules.

52. For a general discussion of net benefit policy analysis, see E. STOKEY & R. ZECKHAUSER, *A PRIMER FOR POLICY ANALYSIS* 134 (1978).

Utilitarian criticism of the public law approach has been launched along two fronts. Specifically, the approach is attacked for its potential to induce an influx of low value mass tort claims that will displace previously marketable, higher value sporadic claims from the system.⁵³ More generally, the objection is that because of the system's inherent biases and other shortcomings, tort liability already stifles and overdeters productive activity, especially involving the development and marketing of new technology, and the public law approach can only exacerbate the problem.⁵⁴ A complete assessment of these objections is beyond the scope of this paper, but as will become apparent in the discussion below, both suffer from readily apparent errors in reasoning, compounded, in the case of the second objection, by rather implausible, unsupported assumptions.

1. The Displacement Argument and Plaintiff Attorney Gatekeepers

The displacement argument predicts that by aggregating relatively low value mass tort claims in a class action, tort system resources will be monopolized by an endless and costly stream of individual damage trials that will undermine the system's functional productivity by excluding relatively higher value sporadic claims.⁵⁵ There is, however, little substance to this position. First, assuming that claims which are cost-effective for plaintiff attorneys to prosecute are cost-effective for the system to process,⁵⁶ then displacement is unlikely to occur at all. Unless the expected return from the classed mass tort claims, net of the costs of litigating the common questions and the individual questions in a series of individual damage trials, exceeds the return expected from competing sporadic claims, plaintiff attorneys would admit the sporadic and exclude the mass tort claims from the system. Functioning as gatekeepers, plaintiff attorneys are thus likely to select among competing claims, sporadic or mass tort, those which are the most administratively efficient for the system to process.

53. See Dam, *supra* note 17, at 52-53.

54. See Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 COLUM. L. REV. 277 (1985).

55. This reason for denying mass tort class actions is implied by the statement in the 1966 advisory committee note to Rule 23 that "[a] 'mass accident' . . . is ordinarily not appropriate for a class action because [given the individual questions of liability as well as damages]. . . an action conducted nominally as a class action would degenerate in practice into multiple lawsuits separately tried." FED. R. CIV. P. 23, advisory committee note, *reprinted in* 39 F.R.D. 69, 103 (1966).

56. It is certainly plausible to assume a high degree of correspondence between private and public burden entailed by the complex legal and factual questions which toxic tort claims typically present. See McGovern, *Toward a Functional Approach for Managing Complex Litigation*, 53 U. CHI. L. REV. 440, 478 (1986); Rubin, *supra* note 10; D. HENSLEY, *supra* note 14.

Second, the displacement argument assumes sporadic and mass tort claims are fungible in terms of deterrence objectives. Because of the distinctive nature of sporadic and mass tort accidents, this assumption is untenable. For many reasons arising from the business policy origins of mass accidents—the centralized, deliberate calculations of private costs and benefits—firms that create such risks are amenable to the regulatory pressures from credible threats of tort liability. In contrast, the fact that many sporadic accidents result from individual, human misjudgments, lapses of attention, and impulsiveness suggest that tort liability may have little or no deterrent effect in such situations. Thus, measured by the deterrence objectives, the system's functional effectiveness will be increased even if mass tort class actions displace sporadic claims.

Third, the possibility of displacement can be minimized by employing damage scheduling to eliminate all individual damage trials. This is because the goal of deterrence, in a system governed by utilitarian principles can be achieved by holding the defendant firm liable for the aggregate loss that its tortious conduct caused, regardless of whether and how damages are distributed among plaintiffs. Although compensation is not a primary concern when deterrence is the objective, it is nevertheless appropriate to note that claimants who would otherwise have been priced out of the system by the costs of individual damage trials would doubtless prefer even this extreme form of bureaucratic justice—damage scheduling—to no justice at all. Moreover, it is likely that those who have suffered above average losses, albeit of relatively low value, also would benefit from increased use of damage scheduling, even to the point of distributing recovery on an equal shares basis. The overall cost-savings generated by the aggregative treatment of common questions and by the elimination of individual damage trials may more than compensate these claimants for any difference between actual losses suffered and the average loss for which they are reimbursed.

2. The Overdeterrence Argument and Marginal Utility Analysis

The overdeterrence argument is premised on the assumption that despite its risks, the net benefits of new technology (e.g., nuclear power) exceed those of the old technology, (e.g., fossil fuel generators, fireplaces, wool sweaters) it replaces.⁵⁷ According to this argument, the tort system—even in its inefficient private law mode, but certainly when its potency is enhanced by public law processes—overdeters firms that produce such new technology in two ways. First, the system imposes the full social costs of the risk from

57. See Huber, *supra* note 54, at 288, 295-99. This presumption is accepted for the sake of analysis, but the claim is most certainly debatable, especially when asserted as a generalization. For advocacy of a more cautious stance towards new technology, see, e.g., Krier & Gillette, *The Un-Easy Case for Technological Optimism*, 84 MICH. L. REV. 405 (1985).

new technology on its producers even though they cannot capture its full social benefits.⁵⁸ Second, the system is so biased against the risks from new technology that it blatantly ignores and hence perversely prefers the greater risks of old technology.⁵⁹ Both propositions have serious logical flaws, and can be salvaged only by making dubious factual assumptions.

The flaw in the first claim is its failure to recognize that while firms may not fully capture the social benefits of new technology—in effect, creating a consumer surplus—tort liability for the social costs can be absorbed into the product or service price without undermining efficient consumption. To the extent that demand decreases, it will reflect the choice of consumers at the cost-benefit margin.

Although the uncaptured social benefits argument can be stated more broadly than a claim of consumer surplus, its analytical defect remains. The argument as broadened asserts that the product or service price is insufficient to incorporate the social benefits of new technology because they are not confined to direct consumers, but are enjoyed indirectly by others and by society collectively. The proposition that the benefits of new technology are not limited to direct consumers is undeniable, but it does not prove that tort liability will overdeter. The conclusion fails simply because it is founded on a wholly unsupportable premise: that tort liability internalizes to defendant firms the full measure of the social costs from new technology. Tort liability comes nowhere near achieving such an all encompassing degree of social cost internalization. Many of the losses suffered by victims are legally immaterial;⁶⁰ deemed too remote,⁶¹ involve irreplaceable goods,⁶² or are understated because they lack a market referent.⁶³ Moreover, the adverse effects

58. See Huber, *supra* note 54, at 291-92.

59. See *id.* at 309-11.

60. Examples include consequential damages, such as a child's loss of parental love, guidance and companionship: see, e.g., *Steiner v. Bell Telephone*, 55 U.S.L.W. 2311 (Pa. Super. Ct. Nov. 18, 1986); mental distress over future injury: see, e.g., *Payton v. Abbott Laboratories*, 386 Mass. 540, 437 N.E.2d 171 (1982); a family member's injury which the claimant did not witness first hand: see, e.g., *Mazzagatti v. Everingham*, 516 A.2d 672 (Pa. 1986).

61. The doctrine of proximate cause traditionally has been applied in a broad if ad hoc manner to constrain the scope of tort liability from reaching sources of risk and from redressing injurious consequences which are considered too attenuated or conjectural even if causally connected to the accident. See generally P. KEETON, D. DOBBS, R. KEETON, D. OWEN, PROSSER AND KEETON ON TORTS 264 (1984).

62. It is doubtful that tort liability can ever provide anything resembling full compensation for serious injuries let alone loss of life. See generally Mishan, *Evaluation of Life and Limb: A Theoretical Approach*, 79 J. POL. ECON. 687 (1971) (criticizing various methods of valuing the loss of life).

63. Examples include the costs imposed on future generations from environmental degradation, the losses of life in the case of the very young and very old whose social value can not be calculated by labor market measures, or the bearing of risks for which there is no insurance market. See generally E. STOKEY & R. ZECKHAUSER, *supra* note 52, at 299-301.

of accidents on third parties and the community generally and collectively are not recoverable.⁶⁴

The argument of uncaptured social benefits also fails because it completely ignores that to the extent a social surplus exists, potential overdeterrence can be ameliorated through a social decision by informed public representatives to "subsidize" the new technology, or, at least, a particular application of it. The "subsidy" is merely a tax on the non-consumer, public beneficiaries of the technology. Our nation has a long tradition of subsidizing new technologies, often on a targeted basis,⁶⁵ and more indiscriminately through tax incentives and indirect public investments, such as new roads and higher education. By compelling public authorities to confront the social costs of new technology, tort liability merely creates pressures for the politically representative branches to make a deliberate, precise, and overt decision whether the expected social benefits from a particular new technology are sufficiently great to warrant a commitment of social resources to promote its development and deployment. It also focuses the attention of public authorities on the distributional effects of the choice to subsidize a new technological venture and the means selected to accomplish that end.⁶⁶

The broad social and narrower consumer surplus claims should also both be rejected because they rest on the fundamentally erroneous premise that activities deserve an exemption from tort liability merely because they gen-

64. See generally *Duke Power Co. v. Carolina Envtl. Study Group, Inc.*, 438 U.S. 59 (1978); Kennedy, *Cost-Benefit Analysis of Entitlement Problems: A Critique*, 33 STAN. L. REV. 387 (1981).

65. See M. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW* 31-108 (1977); see also, e.g., *The Price-Anderson Act*, 42 U.S.C. § 2210 (1982) (encouraging development of the atomic energy industry by imposing a ceiling on tort liability damages for a single nuclear accident).

66. Tort liability may not be the most accurate and efficient cost-accounting method, but it has the virtues of being largely impervious to political and economic pressures to ignore the questions of risk and loss bearing. In any event, the tort system is likely to play no more than a backstop role, since the prospect of liability should induce intervention by public authorities before the new technology is marketed or becomes operative. Rather than the dismay expressed by some commentators, see, e.g., Huber, *supra* note 54, the fact that firms are now publicly seeking government support before they market products with substantial or unknown health risks should be regarded as a healthy sign of public participation and accountability in the subsidy policy-making process.

In light of the possibilities for public subsidies, the crisis tone of some tort system criticism seems premature at best. Implicitly, such criticism reflects distrust of the political process for deciding the fate of new technologies. By seeking to curtail the tort system's effectiveness in regulating risk, new technology advocates appear to be following a strategy of seeking *de facto* preference for such technology without an open hearing and assessment on its merits in the democratic political process. Ironically, this strategy mirrors the tactics and motives of some tort system supporters, who believe the tort and other common-law systems are prone to excesses and manipulation in favor of the poor, workers, and other economically disadvantaged groups. Tort claims provide the means for modern-day Robin Hoods to perpetrate hit-and-run raids on corporate deep pockets. These tort system supporters share with the system's detractors a distrust of the political process, the only difference being the supporters' conviction that the bias favors new technology over the distributional interests of the disadvantaged.

erate more benefits than costs. While total benefits exceed costs, there may still be room for incremental or marginal improvements. The uncaptured social benefit argument simplistically ignores the role of tort liability—whether enforced under a negligence or strict standard—in reducing accident costs at the margins.⁶⁷

The claim that immunity from tort liability ought to be conferred on new technology when its net benefits exceed those of the old technology can only be revived by assuming that consumers grossly and systematically underestimate the risks of old technology.⁶⁸ If this were the case, then price increases induced by tort liability imposed on new technology would drive consumers to old, riskier substitutes. This argument fails, however, because of its implicit assumption that the old technological alternative for some reason is exempt from tort liability. Outside of the relatively rare situation where a consumer might choose to let nature take its course—for example, by rejecting a prescription drug which has significant side effects but promises an offsetting chance of recovery—the assumption appears to have little in common with reality. Most old technologies of human design are subject to tort liability just like the new.⁶⁹ Their costs therefore will reflect risk assessments just as in the case of new technology.⁷⁰

The second claim—that courts systematically ignore the risks of old technology and, in any event, lack the expertise to impose liability discriminately—is founded entirely on implausible and cramped assumptions. Certainly there is no dearth of doctrine mandating judicial scrutiny of the relative

67. See generally Landes & Posner, *supra* note 23.

Tort liability also represents a less costly means of controlling risk than conventional forms of administrative regulation, which entail the expense of continuous surveillance and command and control adjustments. For an analytical framework for comparatively assessing the effectiveness of tort and administrative methods of controlling risk, see Shavell, *Liability for Harm Versus Regulation of Safety*, 13 J. LEGAL STUD. 357 (1984).

68. See Huber, *supra* note 54, at 315-20 (presuming that consumers are unaware of the risk differential between new and old technology, and, more expansively, that risk is not a significant factor in private consumption decisions).

69. Even while he decries the fate of new technology at the hands of the tort system, Huber acknowledges that tort liability has been effective in providing appropriate risk reducing incentives for producers of old technology. See Huber, *supra* note 54, at 331.

In addition, the assumption about consumer ignorance and indifference is unrealistic in failing to appreciate the incentives producers of new technologies have to educate the public through advertising and otherwise to the comparative advantages of the new over the old. Furthermore, in many instances where new and old technology compete, intermediaries such as physicians, insurance and other financial institutions, and public agencies are available and in many situations affirmatively responsible for apprising consumers of the relative risks involved and, should the need arise, for correcting irrational decisions.

70. Even if old technology were to receive a preference, which seems implausible, and in any event is an empirical question, it would not necessarily inhibit development of socially beneficial technologies. Rather, the investment decision would be made on the expectation that should a given new technology prove beneficial, it would gain the arguably sheltered position of an "old" technology.

risks and expected benefits from competing technologies.⁷¹ The claim of judicial indifference to the financial burden of liability on producers of new and socially beneficial technology is refuted by the virtually universal adherence to the unavoidably unsafe constraint on tort liability propounded by Comment k to section 402A of the Restatement (Second) of Torts.⁷² Defendant firms, moreover, have strong motivations to prevent any judicial lapse of attention in this regard.⁷³ Finally, lack of expertise and other deficiencies in the tort system can be corrected through "public law" reforms, such as the use of blue ribbon juries assisted by court-appointed experts to determine technical, medical and other scientific issues.⁷⁴

C. Rights-Based Compensation and Bureaucratic Justice

Rights-based justifications for tort liability are concerned with the fairness of the distributional consequences of an accident for the individuals in-

71. The law is replete with such mandates, which over time have been expressed in more sophisticated doctrinal formulations. It is enough for these purposes to note the multi-factored analysis of benefits versus costs mandated for cases involving ultrahazardous and abnormally dangerous activities, nuisance, and manufacturing and design defects in consumer products. See, e.g., *Barker v. Lull Eng'g Co.*, 20 Cal. 3d 413, 573 P.2d 443 (1978); *Boomer v. Atlantic Cement Co.*, 26 N.Y.2d 219, 287 N.E.2d 870, 309 N.Y.S. 2d 312 (1970); RESTATEMENT (SECOND) OF TORTS, §§ 519-20, 402A, 826.

72. See generally Schwartz, *supra* note 28.

73. One commentator embellishes the claim of systematic judicial bias against new technologies with two rather odd as well as unsupportable assumptions. See Huber, *supra* note 54, at 323-24, 332. The first is that epidemiologic and other scientific studies can identify the risks of new technology but not its benefits. Any cursory review of the relevant medical and scientific literature undermines this claim, and it is certainly in the interest of the producers of new technology to sponsor benefit as well as risk studies. The second assumption is that defendant firms are not effective advocates because they tend to exaggerate the benefits of their new technologies, even to the point of intentionally misleading the courts. While this is a problem, it is one that the confrontational features of the adversary system are specifically designed to solve. Moreover, it would hardly be conducive to the maintenance of orderly process to reward defendant firms with an exemption from tort liability for such abusive behavior.

74. Injecting so much bureaucratic justice into the tort system necessarily raises the question of whether the deterrence and compensation functions of the tort system ought to be transferred to an administrative agency. Contrary to the strong but unexplained faith some commentators have expressed in the administrative solution, see, e.g., Huber, *supra* note 54, at 330 (waxing to the point of revealing naïveté: e.g., administrative agencies will make the correct cost-benefit decision "because their focus is a relentlessly public one." *Id.* at 332); Sugarman, *supra* note 6, at 651-54, 660 (1985) (placing chief reliance on agency regulation while noting parenthetically that there are some problems with the administrative solution), the merits of such a solution are far from unambiguous. The history of regulatory laxity, timidity, and even co-optation in regard to certain large-scale risks does not generate optimism. J. ARTABANE & C. BAUMER, *DEFUSING THE ASBESTOS LITIGATION CRISIS: THE RESPONSIBILITY OF THE U.S. GOVERNMENT* (1986); see Slawson, *The Right to Protection from Air Pollution*, 59 S. CAL. L. REV. 667, 718 (1986). Indeed, abandonment of the tort system in favor of an administrative solution would sacrifice the vital role played by plaintiff attorneys in developing and publicizing evidence of mass torts affecting the health of thousands of people, as well as administrative failure to respond in timely and adequate fashion. See *In re "Agent Orange" Prod. Liab. Litig.*, 611 F. Supp. 1267, 1269 (E.D.N.Y. 1985).

volved.⁷⁵ Theories of distributional fairness range along a spectrum from traditional notions of corrective justice to less fault-laden norms holding that the beneficiaries of risky activity should bear the losses of the relatively few who are injured.⁷⁶ Because of its individualistic premises, corrective justice will provide the critical perspective from which to evaluate the attempt, undertaken in the balance of this paper, to locate significant intersections between individual and bureaucratic justice.

Conventionally, the theory of corrective justice is generated from three axioms.⁷⁷ First, the value of individual entitlements to personal security should be protected against, at a minimum, wrongful or nonconsensual invasions.⁷⁸ Second, those who have not in fact invaded the personal security of the victim or who have not done so wrongfully should be free from legal responsibility for the victim's loss. Third, victims should be made whole—restored to their pre-accident distributional positions—by anyone who has wrongfully invaded their entitlements to personal security.

Because money judgments can never in principle or reality provide a perfect substitute for the right not to be wrongfully harmed in the first place, a postulate of rights-based deterrence should supplement the traditional premises of corrective justice.⁷⁹ Pursuant to this augmented theory of corrective justice, the function of the tort system is to protect rights to personal security

75. See Hoffman & Spitzer, *Entitlements, Rights, and Fairness: An Experimental Examination of Subjects' Concepts of Distributive Justice*, 14 J. LEGAL STUD. 259 (1985).

76. The latter type of theory may address only situations where the injured are strangers and not within the benefitting class, or may apply broadly to potential beneficiaries as well through complex causal, collective good, and probabilistic foresight arguments. Because the goods which benefit society as a whole cannot feasibly be produced without some risk of personal injury, it is reasonable to extrapolate from principles of personal autonomy a duty on the part of society to compensate those statistically destined to suffer the losses, which in effect constitute the inevitable human overhead of the given social enterprise. Such an expansive conception of causal relationships could logically extend to support universal social health insurance.

77. See generally R. NOZICK, *ANARCHY, STATE AND UTOPIA* 54-87 (1975); Coleman, *Corrective Justice and Wrongful Gain*, 11 J. LEGAL STUD. 421 (1982); Epstein, *Causation and Corrective Justice: A Reply to Two Critics*, 8 J. LEGAL STUD. 477, 489 (1979); Fried, *supra* note 8, at 120-21.

78. Corrective justice is actually a structure for analyzing questions of distributional fairness. Definitions of "wrongful" conduct, appropriate "consent," and culpable "invasions" are supplied by, and will vary according to, fundamental moral and social values. See Fried, *supra* note 8; Posner, *supra* note 8.

Rights against wrongful invasions of personal security do not necessarily imply absolute entitlements to be free from all injury. Generally, injury would not constitute a rights-violation if the victim consents. Actual or implied consent would be sufficient to absolve an injurer of liability when the benefits of risk bearing exceed its costs. The problem of determining whether to impose liability is complicated by considerations of distributional fairness. If the risk-bearers are poor, for example, the mere fact that their gain from the benefits of risky enterprise make them better off than they would be if the enterprise were not undertaken may be insufficient reason to justify a denial of compensation. It would be especially difficult to justify leaving the loss where it lies when the enterprise yields disproportionately greater gains for wealthier than for poorer segments of society.

79. See generally Rosenberg, *supra* note 7, at 879.

not only by compensation after-the-fact, but also by policing the behavior of would-be rights violators to prevent wrongful infliction of uncompensable losses—harms which cannot be compensated *ex post*. Recognition of this rights-based deterrence function will have a practical effect on rule selection. Rules which appear appropriate when the focus is exclusively on the amount of *ex post* compensation victims receive may prove inadequate when compared to deterrence-based approaches. While the deterrence-based approach might promise a lower amount of *ex post* compensation, ultimately it may provide greater protection for the rights at stake by reducing the chance of wrongful infliction of substantial uncompensable loss.

It is difficult to credit any rights-based objection to the cost savings from class actions that make the tort system accessible for otherwise low-value, unmarketable claims—claims which are too costly and uncertain to attract contingent fee investments by competent plaintiff attorneys. Nor is there ground for objection when such claims can only gain access by averaging causation and damages to eliminate the expense of individualized determinations in a series of trials following resolution of the common questions. Access, of course, need not always require averaging on an equal shares basis to eliminate the costs of individualization. In some cases, claimants seeking access to the system may find it in their interest to accept a higher percentage contingent fee rather than an incremental broadening of the classifications for averaging in the direction of treating the victim population as an undifferentiated whole.

Significant rights-based objections to mass tort class actions arise in connection with claims that would gain access to the system without the cost savings afforded by aggregate and averaging processes. Achieving process efficiency at the expense of these claimants' substantive rights would seem offensive to notions of individual justice.⁸⁰ However, opposition to aggregative treatment of otherwise marketable claims is often mistakenly predicated on a definition of the baseline of an individual's substantive rights that uncritically equates individual justice with separate actions.⁸¹ It is simply assumed that any benefits claimants may derive from proceeding separately from one another are necessarily entailed by the substantive rights they are asserting. Thus, arguments that class treatment deprives claimants of power to control the destiny of their cases frequently confuse the substantive right of action with advantages gained by strategic exploitation of the process.

Class actions undoubtedly interfere, for example, with the freedom of claimants to select the available venue having the highest award reputation, or to present the case in a manner that prevents the jury from developing

80. See Blum & Kalven, *Public Law Perspectives on a Private Law Problem—Auto Compensation Plans*, 31 U. CHI. L. REV. 641 (1964).

81. See, e.g., Trangsrud, *supra* note 6.

a multiple claim perspective that might induce it to moderate its compensation or punitive damage award. But such opportunistic manipulation of judicial processes to secure a systematically biased or myopic forum hardly comports with notions of even-handed fairness implicit in corrective justice.⁸² Corrective justice similarly would appear to offer little support for the proposition that individuals are entitled to have the public subsidize their personal preference for separate lawsuits to relitigate common questions. The fact that tort litigation confers public benefits—including deterrence of socially inappropriate risks, delivery of compensation to victims, fair and peaceful resolution of disputes, and the elaboration of legal norms—certainly does not require committing public resources beyond the point of negligible return.⁸³

The gap between individual and class actions is far narrower in reality than rights-based critics of public law processes appear to recognize. In contrast to the ideal of individual actions, the dominant feature of the tort system in practice is the bureaucratic justice of settlement. Well over ninety percent of all claims are resolved by settlements, which are predicated upon relatively standardized valuation criteria that reflect the average outcomes derived from sets of similar cases.⁸⁴ Mass tort claims in particular usually result in patterned settlements prescribing schedules of varying levels of recovery for groups of victims defined by types of injury or other pertinent and easily detectable characteristics.⁸⁵ Moreover, given the doctrine of *stare decisis*, the notion of individual control has little relevance to questions of law, since their determination in the first case appealed will govern all future cases arising in the same jurisdiction.⁸⁶ Nor is the choice exclusively between

82. As Professor Coffee notes, it hardly seems unfair that class actions serve to counter the plaintiff strategy of using separate punitive damage actions to expose defendants to "cumulative punishment and, loosely speaking, a kind of double jeopardy." Coffee, *supra* note 15.

83. See Posner, *The Summary Jury Trial and Other Methods of Alternative Dispute Resolution: Some Cautionary Observations*, 53 U. CHI. L. REV. 366, 392-93 (1986).

The strategic gains from public subsidies for separate actions are in any event likely to be illusory. Because victims are and were both consumers and taxpayers, they will be charged or taxed for a substantial portion of the extra costs. They will pay the balance, if any, in higher attorney fees and litigation expenses.

84. See *supra* note 15.

85. See, e.g., *In re "Agent Orange" Prod. Liab. Litig.*, 597 F. Supp. 740; Wellington, *Asbestos: The Private Management of a Public Problem*, 33 CLEV. ST. L. REV. 375 (1984-85) (proposing a comprehensive program, based on the agreement of the manufacturers, insurers and plaintiff attorneys to settle all outstanding personal injury asbestos claims on the basis of a damage schedule applied through an arbitration mechanism).

86. Generally, there is no reality to the notion that claimants have significant personal influence or involvement, let alone control regarding the course of litigation and settlement, other than wielding some degree of ultimate veto power over the settlement price. See Williams, *supra* note 17. Although some commentators suggest that the lawyer's dominant role is the product of professional elitism, see, e.g., Simon, *The Ideology of Advocacy: Procedural Justice and Professional Ethics*, 1978 WIS. L. REV. 29, the more persuasive explanation for the control exercised by lawyers at least in personal injury cases is that under the contingent fee arrangement

class treatment and opting out to an individual action. Bifurcated class actions offer the cost savings of aggregate adjudication of common questions along with respect for the power of claimants to obtain and control through their own counsel an individual trial on damages and other noncommon questions.⁸⁷

Rights-based criticism faults class actions for encouraging class attorneys to strike "sweetheart" settlements with defendants, trading a portion of the compensation due victims for a premium on, or merely the certainty of, the fee recovery. This form of lawyer disloyalty is clearly not created by the class action procedure; it is an ineradicable feature of every settlement negotiation, especially in the personal injury context of plaintiff attorneys repeatedly bargaining with the same defendant representatives or, more likely their insurers, and providing their services under contingent fee arrangements.⁸⁸ But because of the aggregate stakes involved and authorization for pervasive judicial scrutiny of fees and settlements, the incentives for plaintiff attorney disloyalty are likely to be lower in class actions than in separate actions.

It is true that when plaintiff attorneys have only a fractional interest in the recovery under a contingent fee arrangement, they will invest less in the claim than would claimants who possess sufficient resources to finance the litigation themselves. Yet, that differential in interest (termed "conflict" by some) may be negligible in most class actions because they increase the lawyer's stakes, aligning the optimal points of investment preferred by both attorney and client. Because the attorney's stake in a class action is many times greater than it is in a separate action, the attorney's investment will also be far greater in the class than in a separate action. Despite having only a fractional interest, the class attorney will have sufficient incentives to invest at the level which closely approximates if it does not equal the investment level claimants able to finance their own litigation would regard as optimal. While the interests of lawyer and claimants in class actions are asymmetric, the claimant having a much larger expected interest in the outcome than the contingent fee class attorney, this differential is irrelevant as long as the lawyer's interest is sufficiently great to warrant an investment

they are the principle risk bearers.

The myth of personal control might be tolerated as a quaint and rhetorical reminder of how far the common law of torts has moved from a private law mode of resolving disputes towards a system of regulating the risks of social enterprise based upon bureaucratic standardization of claim recognition and redress. Compare the prediction in Holmes, *Path of the Law*, 10 HARV. L. REV. 457, 467 (1897). But when this myth is trotted out to excuse the needless and destructive costs of case-by-case processing of mass tort claims, the time for its abandonment is at hand.

87. See *supra* note 32.

88. See generally F. MACKINNON, *CONTINGENT FEES FOR LEGAL SERVICES* (1964); H. ROSS, *supra* note 17; Schwartz & Mitchell, *An Economic Analysis of the Contingent Fee in Personal Injury Litigation*, 22 STAN. L. REV. 1125 (1970).

at the claimant's optimal level. Asymmetry in the stakes does not preclude a common point of optimal investment; for example, regardless of the stakes a party will pay no more than the market rate for the best available expert witness.⁸⁹

The problem of attorney disloyalty is compounded, according to the critics, by conflicts among claimants concerning distribution of settlement funds. In order to win claimant approval for the settlement, the class attorney may propose to distribute the fund according to a schedule which disproportionately favors the numerous low value claims over usually far less numerous high value claims.⁹⁰ The potential for such extortionate behavior by factions with lower value claims, as well as the potential for plaintiff attorneys to strike a "sweetheart" settlement with the defendant, can be checked by subclassing and judicial supervision of the settlement.⁹¹ Because the value of claims can easily and objectively be differentiated by the severity of injury and the amount of economic losses, both subclassing and judicial scrutiny of proposed settlement distributions are effective safeguards.⁹²

89. Cf. Coffee, *supra* note 15 (noting that in high damage class actions the asymmetric stakes of plaintiff attorneys and defendant firms may not create the incentives for abusive tactics by the latter that such asymmetry would in separation actions).

Professor Coffee notes the prevalence of the "lodestar formula" in setting class attorney fees, and the potential for this time-based approach to create incentives for the class attorney to negotiate collusive "sweetheart" agreements with defendants. See Coffee, *supra* note 15. His analysis, however, overlooks the formula's allowance for adjustments to provide risk, success, and benefit premiums—designed to encourage competent attorneys to undertake and adequately prosecute complex class actions. See *Blum v. Stenson*, 465 U.S. 886 (1984). Courts use these adjustments to prevent collusive settlements. In addition, judicial scrutiny of the settlement and class attorney fee deters collusion.

For these reasons and because promising alternatives exist, it is premature for Professor Coffee to call for a return to the "traditional 'salvage value' or 'percentage of the recover' fee formula." Coffee, *supra* note 15. Among the alternatives that should be investigated are the use of a bidding process to select the class attorney and the authorization for attorneys to purchase claims outright from victims. See Rosenberg, *supra* note 7; Shukaitis, *A Market in Personal Injury Tort Claims* (1986) (Discussion Paper, Program in Law and Economics at Harvard Law School). The winning bid would provide a basis for gauging the success of and appropriate compensation for the actual outcome achieved by the class attorney. Allowing the class attorney to purchase claims for their expected value minus costs would eliminate conflicts of interest between the class and the class attorney. See also Clermont & Currihan, *Improving the Contingency Fee*, 63 CORNELL L. REV. 529 (1978). Such alternatives represent the productive possibilities that have been suppressed by anti-competitive regulation of the market for legal services in personal injury cases, such as the prohibitions against solicitation, barratry, champerty, and maintenance.

90. As Professor Coffee points out, such redistribution of compensation entitlements from high to low value claimants may occur independently of class attorney disloyalty. If, for example, class approval of the settlement requires a simple or super majority vote of all claimants, where each claimant has an equal vote (or at least where the voting power carries a weight exceeding the claimant's relative entitlement share of the settlement fund), it is possible that a coalition of lower value claimants will form and threaten to block settlement as a means of extracting some side-payment from the higher value claimants. See Coffee, *supra* note 15.

91. Both subclassing and judicial approval of settlement are authorized by FED. R. CIV. P. 23.

92. Professor Coffee, recognizing the similarities between factional conflicts in plaintiff classes

Critics recognize that class settlements are subject to judicial oversight and approval, but they argue that transaction costs will prevent dissatisfied class members from organizing to make an effective case in opposing the settlement. In the absence of an effectively organized opposition, courts will lack sufficient impetus to conduct a searching review of proposed class settlements.⁹³ These concerns appear misplaced. First, the cost barrier to organization is far more realistic in small claim class actions, such as those typically involving consumer, securities, and corporate fraud cases, than in mass tort class actions—especially where the claims are marketable as separate actions—involving severe personal injury.⁹⁴ A second reason why doubts about the effectiveness of class opposition to settlement are overbroad is that they fail to distinguish between the ability and incentives of the class representative to supervise the class attorney's day-to-day litigation decisions, and the ability and incentives of all class members—whose stakes are presumably quite high given that their claims were individually marketable despite the enormous litigation costs—to organize when their interests have been focused and merged by the proposed settlement.⁹⁵

The danger of class attorney disloyalty and extortionate behavior by lower value claimants cannot be denied nor can it be policed perfectly, and certainly the costs of judicial intervention might be substantial.⁹⁶ Yet, if the choice of seeking class certification is left to plaintiffs, there is a countervailing danger, more grounded in reality, that plaintiff attorneys will sabotage the possibility of a class treatment to preserve their contingent fees, disregarding

and in the labor union context, correctly observes that the defendant like an employer engaged in collective bargaining may play subclasses off against each other. See *Coffee*, *supra* note 15. But, as in labor negotiations, subclasses can counter such a strategy by coordinating the timing and substance of their bargaining positions. The labor analogy also teaches that the strongest faction, which in the class context would be the subclass comprising the highest value claims, can resist whipsaw tactics because it has a sufficient basis for making a credible threat of forcing the defendant into a costly trial (the equivalent of going on strike).

Judicial review of class settlements provides additional, if not a wholly sufficient, protection against strategic bargaining by defendants. Any possibility that settlements with subclasses of lower value claims will exhaust defendant assets can be dealt with by the court's suspending distribution of all or part of the settlement proceeds until after the higher value claims are tried.

93. See *Dam*, *supra* note 17.

94. See *id.*

95. Indeed, the court might facilitate such organization by appointing a lawyer to oppose the settlement.

96. But recognizing the risk does not concede the reality. There is no empirical evidence that settlements disproportionately favoring relatively low value claimants have actually occurred. Moreover, the mere skewing of recovery in favor of lower value claims would not be sufficient evidence of attorney disloyalty. The tilt might well be explained by the fact that more severe injuries are likely to entail greater complexity, and hence disproportionately greater litigation expense.

In addition, taxing relatively high value claimants for the benefit of low value claims that might otherwise be unmarketable to the plaintiff class attorney is not unfair when the transfer confers gains upon the high value claimants in terms of the enhanced deterrence value from an increase in the overall liability threat. See *Rosenberg*, *supra* note 7, at 917-18.

the interests of victims. Plaintiff attorneys are likely to be abetted in this effort by their professional counterparts on the defense side, whose fees are equally threatened by class action efficiencies.

Deciding whether an expression of dissatisfaction with class treatment serves the interests of the plaintiffs or their attorneys will be difficult only when the cost saving from class treatment is relatively low, and the settlement schedule substantially diverges from generally established compensation patterns for severity of injury and amounts of economic loss involved. While those conditions are unlikely to obtain in mass tort cases involving high value claims, courts might avoid the costs of detecting whether the motive for opposition to class treatment is attorney disloyalty by allowing subclasses of dissatisfied claimants to opt out of the proposed settlement class to prosecute individual damage trials. Permission for this limited opt-out should be granted only on the condition that the exiting claimants pay their share of the litigation costs and fees relating to the class attorney's discovery and other work in preparing the plaintiffs' case on the common questions. To further deter attorney disloyalty, opt-out claimants should also be required to pay a user fee equal to the public costs of conducting the separate damage trials.⁹⁷

II. INTERSECTIONS OF INDIVIDUAL AND BUREAUCRATIC JUSTICE

This section redirects the focus from concerns about cost and information barriers as justifications of mass tort class actions to individual justice considerations. The present inquiry asks whether the ends of individual justice—the tailored application of governing norms to the circumstances and interests of the particular parties—may be more effectively served by class treatment of mass tort claims than by the system's traditional disaggregative process. For purposes of this inquiry it is assumed that neither the quality of nor the expense of developing post-accident information regarding issues of causation and damages makes class treatment necessary or expedient. Class treatment of mass accident claims, for example, is not required because efforts to particularize causal relationships into small reference groups or even down to the level of individuals is impractical, or, indeed, because

97. A similar approach, albeit without the user fee component, is being developed for the comprehensive settlement of personal injury claims arising from occupational exposure to asbestos. See Wellington, *supra* note 85. Professor Coffee suggests an effective and perhaps complementary solution, which would limit the plaintiff attorney fees to that portion of any damages recovered in the individual actions in excess of what the claimant would have received under the class settlement. See Coffee, *A Policy Primer on Class Action Reform*, 62 IND. L. J. 625 (1987); cf. FED. R. CIV. P. 68.

causal indeterminacy may actually increase when the data is stratified.⁹⁸ Thus, it is assumed that there are neither cost nor information barriers to determining the ratio of excess risk to background risk in a mass toxic tort case in terms of a hierarchy of discrete, relatively homogeneous subclasses or even in terms of the personal "risk portfolio" of each victim.

Even under these assumptions about accurate information and low administrative costs, the use of which make disaggregative processes unrealistically plausible, there are important areas where the ends of individual justice are better served by public law processes. These intersections where collective processes reinforce individualism have one prominent common feature: each involves situations in which the ex ante relationship between the parties entails distributive effects resulting from the class-wide risk of accident, effects which have legal significance according to the substantive and remedial norms of tort law. Because of the tort system's traditional disaggregative processes, however, these ex ante distributional effects are likely to be ignored in the determination of liability and damages.

These processes, which trained attention unrelentingly on the particulars of each claim, tend to predispose courts in conducting their retrospective accident investigations to view the causal relationship between a plaintiff's ex post injuries and the defendant's ex ante conduct as linear and determinate. Constrained to focus on the tangible specifics of this direct and one-to-one conception of the causal relationship, courts are apt to neglect the systemic, class-wide nature and distributional effects of the mass accident risk in the ex ante context. Judicial myopia is fairly assured by the fact that when individual claimants proceed by separate rather than class actions, none will have sufficient incentives to develop information regarding these ex ante conditions. This is because the costs of production, which usually exceed the value of such information in any given case, cannot be recouped from the other claimants who will share in its benefits. By preventing, or at least strongly inhibiting, inquiry into the class-wide nature and effects of the mass accident risk in the ex ante context, disaggregative processes undermine the objectives of individual justice: tailored determination of liability and damages.

The balance of this section elaborates the ex ante distributional effects of disaggregative processes on application of the due care liability norm and the make-whole remedial norm. It also demonstrates that the ends of in-

98. In some degree of correspondence, causal uncertainty will increase as the risk criteria for subgrouping the exposed population become more refined. Not only is it possible that the reliability of causal inferences will diminish as the subgroup becomes smaller and more distinctive. See Epstein, *supra* note 24, at 1380; Wright, *Causation in Tort Law*, 73 CALIF. L. REV. 1735, 1823-24 (1985). But indeterminacy may also arise because assigning relative values to stratification factors and determining the order in which they are added to derive subgroup boundaries inject other elements of significant ambiguity into the picture. See Lagokos & Mosteller, *supra* note 38; Rosenberg, *supra* note 38.

dividual justice in the application of these norms may require abandoning the disaggregative process in favor of the collective means of bureaucratic justice.

A. The Due Care Liability Norm and the Inseparable Nature of Ex Ante Risks

The due care standard of liability requires courts to compare the accident prevention efforts made by the defendant against the probable loss that will result from varying levels of care. In rights-based terms, due care mediates between competing entitlements of autonomy, action and security by defining limits to the risks one may impose on another. Risk imposition is not per se an infringement of right, but at some point the risk/benefit ratio will be found excessive and grounds for holding the defendant liable.

Disaggregative processes may, however, prevent courts from recognizing excessive mass accident risk in the case of victims whose losses are relatively low. When considered in isolation, the potential loss of each such victim will appear insignificant compared to the care taken by the defendant firm. The firm's investment in accident prevention will indeed dwarf the interests at stake for any given victim, even those who suffer relatively high value losses. This results from the fact that, in mass accident situations, the firm's accident prevention measures are of necessity the product of a collective, undifferentiated assessment of the probable loss from its activities for the class of potential victims as a whole; and, correspondingly, care-taking usually cannot be adjusted on an individualized basis.

Because mass accident risks are indivisibly imposed on the class, an accurate determination of whether firms have taken appropriate care requires that courts, like the firms themselves, sum the expected losses for all members of the at-risk population, making the comparison of both the care and loss factors on a class-wide basis. Disaggregative processes, however, may lead a court to focus on the probable loss for the particular claimant in the case, and compare it to the care that the defendant has taken, which necessarily is class-wide in character. Such an asymmetrical derivation of the care-probable loss ratio would support denial of liability for the relatively low value claims. For if each case is treated as separately arising from a discrete relationship between the defendant firm and the particular claimant, the court will frequently find that the defendant's class-wide investment in care more than satisfies the concern it owed to the victim.

In rights-based terms, such comparisons of individual expected loss to class-wide care is distributionally unfair in two respects. First, to deny liability on low value claims deprives those victims of legal protection for their rights of personal security. Second, denial of liability on those claims also reduces the protections from the deterrent effect of threatened liability for the class as a whole. The interest of potential victims in deterrence, which is undermined

by disaggregative process, is unitary for the class; regardless of the value of their future claims should they incur injury, when a significant number of the claims will not be redressed, each member of the at-risk population experiences an *ex ante* devaluation of entitlements measured by the increased chance of suffering incompensable loss.⁹⁹

To illustrate, suppose that in the course of operating a nuclear power plant radiation accidentally is released into the atmosphere. For the sake of simplicity, assume that only two people, A and B, reside within the danger zone, and that they live on opposite sides of the plant. If the winds blow in each direction fifty percent of the time, each has an equal chance of suffering radiation related disease should an accident occur. If the winds blow in A's direction, the compensable loss will be \$100 and an equal amount, figuratively speaking, in incompensable suffering. Should the winds blow in the opposite direction, B will incur \$10 in compensable losses and the notional equivalent loss for which damages are neither a principled nor practical substitute. In this rights-based world, A, B, and the nuclear power firm share the benefits of the firm's activity, and as contracting parties they are presumably in agreement that due care requires the firm to invest up to but not beyond the optimal amount in safety. Existing technology permits the firm to affect the chance of an accidental release of radiation only incrementally according to the following levels of safety investment:

Level of Care	Investment	Chance of Accident	Expected Loss for A(100) or B(10)	
#1	0	.5	A = 50	B = 5
#2	19	.2	A = 20	B = 2
#3	40	.001	A = .1	B = .01

On these assumptions, the firm can satisfy the due care requirement by investing at level #3. Accident costs are minimized when 40 is invested; while the marginal cost of care for the firm increases by 21 over the level #2 investment, the marginal decrease in the total expected loss is 21.89.¹⁰⁰ The decrease in total expected loss should be doubled to reflect the incompensable loss savings produced by a level #2 investment.

Suppose that the accidental release occurs and the wind is blowing in B's direction. In a subsequent damage action by B, it is discovered that the firm only made the level #2 investment of 19. If the court treats B's claim as

99. See discussion of rights-based deterrence, *supra* notes 77-79 and accompanying text.

100. The marginal expected loss saving resulting from investigating 40 instead of 19 is calculated as follows: 22 (aggregate expected loss at level #2 investment) minus .11 (aggregate expected loss at level #3 investment) equals 21.89.

arising from a relationship with the firm which is discrete and separate from A's, liability may be denied. Examining the ex ante context, the court would observe a ratio of care to expected loss for B of 19 to 2. On such an individualized appraisal, the firm's care toward B will be seen as due, probably even excessive. B recovers nothing and suffers uncompensable loss as well.

Of course, when it invested 19, the firm ran the risk of injuring A and incurring a negligence judgement for \$100. Yet, if the threat of liability is to A alone, the firm will not be induced ex ante to invest at level #3. For the firm will find it profitable to invest only at level #2 notwithstanding potential liability to A. It is cheaper for the firm to invest 19 and bear an expected liability of 20 ($.2 \times 100$), for a total operating cost of 39 than it would be to invest 40 and bear no liability.

The most dramatic effect of disaggregative treatment is not only that B's entitlements are entirely unprotected. But it is that A's rights, while fully protected against compensable losses, are devalued ex ante in the example by an increase in expected uncompensable loss from .1 to 20. As the example plainly illustrates, the fate of A's entitlements, though fully protected against compensable losses, is nevertheless dependent upon the fate of B's; if A is to avoid wrongfully inflicting compensable loss, infringement of B's low value entitlements must be redressed.

The firm essentially aggregates expected costs in the ex ante context and the court disaggregates those costs in making its ex post determination of liability. Since expected costs are necessarily inseparable because of the class-wide nature of the risks involved, the asymmetry in ex ante and ex post assessments can be corrected only by judicial aggregation of expected costs in determining liability, even in cases where the individual claimant's expected and actual losses are relatively low. To be sure, mass accidents cause injuries to many A's and B's, and this should be obvious to the courts that hear the resulting claims. But when these injuries arise over time and are widely dispersed, as is likely when long-latency disease is involved, the disaggregative process of separate actions may lead these courts to make the error of treating each claim as arising from a separate and discrete relationship between defendant and plaintiff. If a sufficient proportion of the low-value claims are denied because a high ratio of aggregate-care taking to individual expected loss satisfies the due care requirement, then the entire population at-risk, including those with relatively high-value stakes, will suffer serious uncompensable losses.

B. The Make-Whole Recovery Norm and the Average Response to Risk Ex Ante

The rights-based tort system promises to restore victims of tortious conduct to their pre-accident distributional positions—at least with respect to compensable losses. At great cost, the particulars of each victim's injury are specifically examined and valued to the end of recompensing no more or less

than what was taken by the defendant's tortious conduct. Yet, this process of particularization and the presumption of a linear, discrete relationship of defendant and victim lead courts to ignore the class-wide response to the risk of accident by potential victims in the ex ante context. As a result, the costs of such responses will be omitted from the judgment's accounting of injury loss. But far more important, by ignoring the ex ante response to risk by potential victims, the particularization of loss may defeat or impede judicial efforts to comply with the make-whole norm. Because this ex ante response is often formulated on a standardized basis for all or large subgroups of potential victims, there may be cases where determining compensation according to the class-wide average loss may achieve the normative goal more effectively than will individualized adjudication.

If, as is plausible to assume, the members of an at-risk population are risk averse, the ex ante response to the defendant's hazardous activities will generally take the form of commercial or self-insurance against losses from potential accidents. When the accident risk arises from a contractual relationship between the defendant and potential victims, the insurance will be provided along with the product or service involved under compulsion of the tort system.¹⁰¹ The defendant obtains the policy and surcharges consumer-potential victims for the premium. When the accident risk is imposed outside of a contractual relationship between the defendant and potential victims, the insurance response will be designed to make the actual victims whole by supplementing tort damage awards.¹⁰² The premiums for the tort insurance represented by damage awards are not paid for by potential victims, but rather are charged to the defendant and its customers. Potential victims in non-contract situations, however, bear the costs of the supplementary commercial or self-insurance that covers the portion of the loss not compensated by the defendant firm in the damage award. The at-risk population thus would insure to make victims whole by hedging against the contingent and potentially partial recovery in cases where questions of causal indeterminacy are resolved by a preponderance (all-or-nothing) or proportionality (apportionment according to causal contribution) rule.¹⁰³

Significantly, the risk insured against and premium paid by potential victims—regardless of whether the insurance is purchased under a product or service contract or whether it is supplementary insurance purchased outside of a contractual setting—will often be set or calculated in terms of the average

101. See Epstein, *Products Liability as an Insurance Market*, 14 J. LEGAL STUD. 648 (1985); Rea, *Comments on Epstein*, 14 J. LEGAL STUD. 671 (1985); Moore & O'Connell, *Foreclosing Medical Malpractice Claims by Prompt Tender of Economic Loss*, 44 LA. L. REV. 1268 (1984).

102. Supplemental insurance would cover the deficit left by the tort judgment, including a judgement denying all recovery.

103. For a general discussion of the preponderance and proportionality rules, see Rosenberg, *supra* note 7.

expected loss from a given type of injury for the at-risk population as a whole. This is generally true for product-service insurance where transaction and information costs are barriers to customized arrangements. Regardless of their particular economic stations in life and risk preferences, all consumers will pay an equal premium price under the product or service contract to cover the same range of hazards. Having purchased the same insurance policy, the only damage award that will restore victims of product or service risks is one that provides compensation measured by the average loss. The differentiation of damage awards according to the individual victim's actual loss—consistent with the disaggregative process of the system—contravenes the make-whole norm and anti-redistribution principles implicit in the concept of individual justice. The effort to tailor recovery to the actual ex post loss operates in effect as a regressive tax, redistributing income from the less well off to the better off.

In the absence of a contractual relationship, there may be situations where the supplementary ex ante insurance obtained by potential victims will of necessity be based on the average probability of causation.¹⁰⁴ Generally these situations arise when potential victims are confronted by the prospect, over which they have no practical control, that their injury will be causally indeterminate. If, in addition, the probability of causation is a random factor, then the ex ante insurance purchased by victims will be geared to the average probability of causation. In order to satisfy the make-whole norm, as will be illustrated below, such an ex ante insurance response must be taken as prefiguring the ex post measure of damages at the average probability of causation. Individualization of causal probabilities, whether tailored to relatively small victim subclasses, or—even if it were possible to achieve the theoretical limiting case—tailored to the particular claimant's circumstances, will only prevent fulfillment of the remedial norm where the probability of causation applicable to a specific claimant or subclass is below the average.¹⁰⁵

Returning to the nuclear power plant example for illustration of these points, suppose that the radioactive cloud will spread the risk of a certain type of cancer to the population living down-wind of the site. Also assume that the chance of being stricken by radiation-related disease is solely a function of distance from the plant site when the cloud is first encountered, and members of the population are randomly moving about the hazardous zone so that they have no practical means of controlling the risk. If all members of the population also bear a uniform background risk of contracting

104. In the mass tort context, the contractual and non-contractual situations are mainly distinguished by the fact that in the latter both the factors of loss and the probability of causation are variables, and hence each member of the at-risk population has a differential expected loss.

105. This point was initially noted in Rosenberg, *Toxic Tort Litigation: Crisis or Chrysalis? A Comment on Feinberg's Conceptual Problems and Proposed Solutions*, 24 Hous. L. Rev. 183 (1987).

the cancer in question,¹⁰⁶ then they will rationally purchase insurance according to the same probability of causation—i.e., the average for the population as a whole. Contemplating that compensation from the tort system would be apportioned according to the probability of causation,¹⁰⁷ the balance of the expected loss for which each potential victim would purchase supplementary insurance would be calculated on a fifty percent probability.

If, however, the probability of causation is individually determined in each subsequent claim by a disease victim, the make-whole norm may be defeated in a substantial number of cases. Victims whose probability of causation is below fifty percent because they encountered the radiation cloud at a relatively remote distance from the plant site will not receive compensation that makes them whole. A victim whose probability of causation is inferred to be twenty percent, for example, will receive compensation for only seventy percent of the injury losses—twenty percent in tort damages against the nuclear power firm and fifty percent in proceeds from the supplementary insurance purchased *ex ante*. In contrast, computing and awarding tort damages according to the average probability of causation for all of the mass tort victims would make all of them whole.

CONCLUSION

Mass accident class actions achieve the tort system's basic compensation and deterrence goals far more effectively than its traditional disaggregative processes. The major purpose of this paper has been to demonstrate that this conclusion remains true even when the class action imports significant elements of bureaucratic justice. Although such elements as mandatory class treatment and damage scheduling make tort liability extremely potent, I have shown that the fears expressed by some commentators that this will only exacerbate the system's potential for overdetering technological innovation have little basis in reality. Indeed, the "public law" approach represented by class actions minimizes the incentives for inefficiency and irrationality that have justifiably raised concerns about whether the tort system is a sensible mode of regulating the risks of advanced technology.

The bulk of the paper, however, concerns the compatibility of the bureaucratic justice introduced through means of class actions with the system's ideal of doing individual justice. To test the proposition that bureaucratic justice does not subvert, but rather enhances the tort system's capacity to achieve individual justice, the paper evaluates the performance of class treatment in terms of the rights-based conception of individualistic, possessory

106. This assumption is made to simplify the example; the validity of the conclusions would not be affected by variable background risk factor.

107. The analysis would be more complicated if the system used the traditional preponderance-of-the-evidence rule and all-or-nothing judgments, but it would not result in a different conclusion.

entitlements to security from wrongful injury. With respect to class treatment of common questions the findings are unambiguous. By eliminating the inefficiencies of separate actions, mass accident class actions promise very substantial increases in compensation for victims. In addition, by assuring access to the system for relatively low value claims—claims that would not be marketable to competent plaintiff attorneys as separate actions—not only are those claimants compensated for their losses, but also the probability of uncompensable loss is greatly reduced for all potential victims.

When the aggregative and averaging methods of bureaucratic justice are extended to noncommon questions raised by otherwise marketable claims—claims which do not require class treatment to gain access to the system—a danger of redistribution from higher to lower value claimants arises. In addition, regardless of the value of the classed claims, the class attorney has incentives to make a collusive settlement with the defendant, trading a significant amount of class recovery for a higher or certain attorney fee. These problems are not unique to class actions; the settlement of separate actions involves similar dangers of redistribution and attorney disloyalty. Moreover, careful analysis indicates that there is less warrant for concern about these dangers in the class action than in the separate action context. The greater stakes for the class attorney, combined with the possibility for effective judicial oversight of settlements and fees minimizes the risks of redistribution and class attorney disaffection. Judicial policing is not perfect nor are its costs negligible. Therefore, a market-type of approach should be adopted in certain cases—where the risks of redistribution and class attorney disloyalty and the costs of detecting them are high—to allow exit (opting out) from the class action's aggregative and averaged resolution of noncommon questions, particularly damages. To counter the more serious danger of plaintiff attorneys opposing class actions to protect their fees rather than their client's interests, permission to opt out should be conditioned on payment of the opt-out claimant's share of the costs incurred in preparing the common questions and of the costs represented by the public resources consumed by the individual damage trials. This compromise of bureaucratic justice is consistent with the instrumental conception of process embodied in the "public law" model of the tort system, which seeks not purity of form but simply to maximize substantive productivity.

The most ambitious thrust of this paper is to show that in certain contexts, even when there exist neither cost nor information barriers preventing access to the tort system, the aggregation and averaging of bureaucratic justice better serves individual justice than the system's traditional disaggregative process. Generally, this appears to be the case in mass accident situations because the *ex ante* risk of injury experienced by the population of exposed victims results in uniform and collective distributional consequences which are likely to be ignored in assessing liability and awarding compensation *ex post* in the system's traditional process. In contrast to the probabilistic and class-wide per-

spectives engendered by the bureaucratic justice of class actions, the traditional disaggregative process tends to seek linear, determinate, and particularized determinations of liability and compensable loss. Necessarily such a disaggregative process will fail to capture collective and statistically averaged responses to *ex ante* risk, even though these responses have demonstrable distributive consequences for the class of potential victims—consequences which are substantively relevant to prevailing liability and compensation norms.

The paper sketches two examples indicating the differences in distributive outcomes under the bureaucratic justice of class actions and the system's private law, disaggregative processes. First, I show that the disaggregative approach undermines the collective interest of potential class victims in rights-based deterrence. Unless the aggregate class-wide risk of an activity is compared to the defendant's safety investment, courts are likely to deny liability in cases involving low value claims. At a certain point, especially in cases where the choices among levels of care-taking are discontinuous, the removal of such claims from the threat of liability may sharply reduce the defendant's safety incentives. By thus increasing the risk of uncompensable loss, the system's disaggregative process effectively devalues the security entitlements of the at-risk population.

Second, stimulated by conditions of *ex ante* risk, potential victims will purchase insurance. When the risk is randomly distributed among the population of potential victims, so that none has a distinctive chance of being injured, then insurance will be purchased to cover the average risk borne by the population as a whole. Where the risk arises in a contractual setting, for example consumer product injuries, the insurance will be purchased by the potential victim as part of the product price. Because each consumer pays an identical amount of the price as insurance premium, regardless of the economic status each victim suffering the same physical harm should receive compensation in equal shares computed at the average level. *Ex post* particularization ignores the *ex ante* uniformity of insurance response, and operates as a regressive tax against low-income consumers. A similar uniform insurance response arises in non-contract settings, for example when a population is subject to an environmental risk of disease from toxic substance exposure. If members of the population cannot affect the chance of injury, then each will purchase insurance based on the average probability for the population as a whole. The insurance they purchase will be supplementary, covering gaps in compensation provided by the tort system. However, if the *ex post* determinations are particularistic, then a large number of victims who receive below average (including zero) compensation from the tort system will not be made whole by their supplementary insurance. In order to assure that all victims are made whole by the combination of tort and private insurance, tort compensation must be provided to all victims on an average basis.

These examples of the distributional effects of using private law process suggest a broader critique of the traditional tort system. Its basic structure

is flawed because its linear, determinate, and particularistic modes of adjudication fail to account for conditions of uncertainty, *ex post* as well as *ex ante*. Uncertainty cannot be reduced to absolute values without depriving one or the other party of individual justice. When such conditions of uncertainty prevail, only a public law perspective, implemented through the bureaucratic modes of mandatory class actions and damage scheduling, through a market approach allowing individual damage trials as long as opt-out claimants pay their own way, or through other means dictated by the circumstances of the accident, can do individual justice.